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CLAIM AMENDMENTS:

A listing of the entire set of claims 1-33 (including a cancellation of claims 1-13 without prejudice or disclaimer to the subject matter of claims 1-13) is submitted herewith per 37 CFR §1.121. This listing of claims 1-33 will replace all prior versions, and listings, of claims in the application.

1.-13. (Cancelled)

14 (New) A wireless network, comprising:

a base station;

a terminal assigned to the base station for exchanging user data and control data, the terminal operable to transmit a first signaling sequence as an indication of a wish by the terminal to use one of a plurality of contention channels;

wherein the base station is operable to generate and detect a pulse representative of a correlation of the first signaling sequence in response to receiving the first signaling sequence; and

wherein the base station is further operable to transmit a provision message over at least one contention channel to the terminal in response to generating and detecting the pulse

15. (New) The wireless network of claim 14,

wherein the terminal is further operable to transmit the first signaling sequence during a specific time slot of a transmitting-end reference frame; and

wherein, after receiving the provision message over the at least one contention channel from the base station, the terminal is further operable to transmit at least one of a terminal identification and a data packet over a first contention channel to the base station.

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16. (New) The wireless network of claim 14, wherein the base station includes:
a matched filter operable to generate the pulse; and
a peak detector operable to detect a peak of the pulse during a specific time slot of a receiving-end reference frame.
17. (New) The wireless network of claim 14,
wherein the terminal is further operable to transmit the first signaling sequence as one of a Gold sequence, a Kasami sequence or a Golay sequence during a specific time slot of a transmitting-end reference frame.
18. (New) The wireless network of claim 14,
wherein the terminal is further operable to transmit a second signaling sequence to the base station in response to a failure to receive an acknowledgement of the reception of the first signaling sequence by the base station within a predefined period of time after transmission of the first signal sequence to the base station.
19. (New) The wireless network of claim 14,
wherein, subsequent to receiving the provision message, the terminal is further operable to transmit a second signaling sequence to the base station in response to a failure to receive an acknowledgement of a reception of data by the base station over an assigned contention channel.
20. (New) The wireless network of claim 14,
wherein the terminal is further operable to re-transmit the first signaling sequence to the base station with an increase energy in response to a failure to receive an acknowledgement of the reception of the first signaling sequence by the base station within a predefined period of time after the first transmission of the first signal sequence to the base station.

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21. (New) The wireless network of claim 13,
wherein the terminal is further operable to transmit the first signaling sequence during a specific time slot of a transmitting-end reference frame; and
wherein, after receiving the provision message over the at least one contention channel from the base station, the terminal is further operable to transmit at least one of a terminal identification and a data packet over a first contention channel to the base station in response to the provision message indicating the specific time slot of the transmitting-end reference frame
22. (New) The wireless network of claim 13,
where the first signaling sequence is one of a plurality of signaling sequences associated with the wireless network
23. (New) The wireless network of claim 22,
wherein each signaling sequence is further associated with a different data rate.
24. (New) A base station in a wireless network for exchanging user data and control data with a terminal, the base station comprising:
a receiver operable to generate and detect a pulse representative of a correlation of a signaling sequence in response to receiving the signaling sequence from the terminal; and
a transmitter operable to transmit a provision message over at least one contention channel to the terminal in response to a generation and a detection of the pulse by the receiver.

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25. (New) The base station of claim 24, wherein the receive includes:
a matched filter operable to generate the pulse; and
a peak detector operable to detect a peak of the pulse during a specific time slot of a receiving-end reference frame.
26. (New) A terminal in a wireless network for exchanging user data and control data a base station, the terminal comprising:
a transmitter operable to transmit a first signaling sequence to the base station, the signaling sequence being indicative of a wish to use one of a plurality of contention channels; and
a receiver operable to receive a provision message from the base station over at least one contention channel subsequent to the transmission of the first signaling sequence by the transmitter.
27. (New) The terminal of claim 26,
wherein the transmitter is further operable to transmit the first signaling sequence during a specific time slot of a transmitting-end reference frame; and
wherein, after receiving the provision message over the at least one contention channel from the base station, the transmitter is further operable to transmit at least one of a terminal identification and a data packet over a first contention channel to the base station.
28. (New) The terminal of claim 26,
wherein the transmitter is further operable to transmit the first signaling sequence as one of a Gold sequence, a Kasami sequence or a Golay sequence during a specific time slot of a transmitting-end reference frame.

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29. (New) The terminal of claim 26,
wherein the transmitter is further operable to transmit a second signaling sequence to the base station in response to a failure to receive an acknowledgement of the reception of the first signaling sequence by the base station within a predefined period of time after transmission of the first signal sequence to the base station.

30. (New) The terminal of claim 26,
wherein, subsequent to receiving the provision message, the transmitter is further operable to transmit a second signaling sequence to the base station in response to a failure to receive an acknowledgement of a reception of data by the base station over an assigned contention channel.

31. (New) The terminal of claim 26,
wherein the transmitter is further operable to re-transmit the first signaling sequence to the base station with an increase energy in response to a failure to receive an acknowledgement of the reception of the first signaling sequence by the base station within a predefined period of time after the first transmission of the first signal sequence to the base station.

32. (New) The terminal of claim 26,
wherein the transmitter is further operable to transmit the first signaling sequence during a specific time slot of a transmitting-end reference frame; and
wherein, after receiving the provision message over the at least one contention channel from the base station, the transmitter is further operable to transmit at least one of a terminal identification and a data packet over a first contention channel to the base station in response to the provision message indicating the specific time slot of the transmitting-end reference frame

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33. (New) A method of exchanging user data and control data in a wireless network between a base station and a terminal, the method comprising:

a transmission of a signaling sequence from the terminal to the base station, the signaling sequence being indicative of a request by the terminal to use of one of a plurality of contention channels;

a generation and a detection of a pulse being representative of a correlation of the signaling sequence by the base station in response to the base station receiving the signaling sequence from the terminal; and

a transmission of a provision message by the base station over at least one contention channel to the terminal in response to a generation and a detection of the pulse by the base station.

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